



JOB DESCRIPTION

Title: **PLANTS/SUBSTATION SUPERINTENDENT**
Department: Power
Class Code: 3405
FLSA Status: Non-Exempt
Effective Date: April 1, 1999 (Rev 07/2008)
Grade Number: 28

GENERAL PURPOSE

Under the broad supervision from the Engineering Manager, supervises the Generation/Substation Lead Worker. Oversees operations and maintenance within the substations and generation plants. Provides programming for SCADA and automated hydro operations. Develops relaying schemes and programs electronic relays for protection of substations, generating plants, transmission systems, and distribution systems.

EXAMPLE OF DUTIES

- *-- Develop relay protection schemes for transmission systems utilizing zone relaying as well as directional over-current.
- *-- Develop relay protection schemes for substations.
- *-- Programs PLC's (programmable logic controllers) for automated hydro generations. Programming to protect plant, diversion, penstock while maintaining water flow to downstream.
- *-- Programs all electronic relays and connects to computers to network with desktop computers at Power Department.
- *-- Programs SCADA (supervisory control and data acquisition) system to allow for remote monitoring and control of all substations, capacitor banks, and Water/Sewer SCADA system components. Control to include voltage regulation and power factor as well as open/close operations.
- *-- Supervises the preparation of all required reports for compliance to all permits associated with generation facilities.

- *-- Supervises maintenance and operations of Gas Turbine Generation Plant.
- Performs related duties as required.

MINIMUM QUALIFICATIONS

Education and Experience

- Bachelors degree in Electrical Engineering and two (2) years experience in relaying and systems controls and two (2) years supervisory experience, or an Associates Degree in Engineering Technology and four (4) years experience in system control and protection and SCADA programing, two (2) of which must be in a supervisory position or any equivalent combination of education and experience.

Special Requirements

- Must possess a valid Utah Driver's License.
- Must be willing to accept standby assignments when needed.

Necessary Knowledge, Skills and Abilities

- Thorough knowledge of "State of the Art" solid state electronic relaying.
- Thorough knowledge of "State of the Art" SCADA systems.
- Considerable knowledge of computer networking and programming. Knowledge of word processing, spreadsheets, C, Fortran, and AutoCad.
- Thorough knowledge of programmable logic controllers using ladder logic.
- Considerable knowledge of all Federal Regulations regarding Air Quality, above ground storage tanks, and Federal Energy Regulatory Commission guidelines for hydro production.
- Ability to develop protection schematic drawings and blue prints.
- Ability to create effective working relationships with employees, other departments, public, and other regulatory agencies; ability to communicate both verbally and in writing; special ability to supervise employees and manage effectively during extremely stressful power system emergency situations.

TOOLS & EQUIPMENT USED

- Personal computer including word processing, spreadsheet and specialized software; radio; phone, and other equipment pertaining to this position.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this job, the employee is frequently required to sit; walk, talk or hear; use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms.
- The employee must frequently lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus. Must be able to meet DOT hearing standard requirements.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this job, the employee regularly works in outside weather conditions. The employee occasionally works near moving mechanical parts in high, precarious places and is occasionally exposed to wet and/or humid conditions, ambient air, temperature extremes, fumes or airborne particles, traffic, toxic or caustic chemicals, risk of electrical shock, and vibration.
- The noise level in the work environment is usually moderate, but occasionally high.

DEPT/DIVISION APPROVED BY: _____ DATE: _____

EMPLOYEE'S SIGNATURE: _____ DATE: _____

H. R. DEPT. APPROVED BY: _____ DATE: _____

*Essential functions of the job.